

Application No. 10/763,445
Amendment dated January 25, 2006
Reply to Office Action of October 25, 2005

Docket No.: 66046-0007 (01-rTRN-28)

REMARKS

Applicants have carefully reviewed the Office Action mailed October 25, 2005, and thank Examiner Pang for his detailed review of the pending claims. In response to the Office Action, Applicants have amended claims 1, 3-5, 7-9, 16, 26-28, 30, 31, 33-55, 37, 38, and 49; canceled claims 2, 6, 10, 15, 21, 29, 32, 36, 40, and 42-48; and added new claims 51-66. By way of this amendment, no new matter has been added. Claims 6, 10, 21, 32, 36, and 42-48 were previously withdrawn. Accordingly claims 1-4, 5, 7-9, 11-14, 16-20, 22-31, 33-35, 37-39, 41, 49, and 50-66 remain pending in this application. Applicants respectfully request reconsideration of the present application in view of the above amendment and the following remarks.

Claim Amendments

Independent claim 1 has been amended to incorporate the limitations of canceled dependent claims 2 and 15. Independent claim 16 has been amended to more distinctly claim the subject matter. Support for the amendments for claim 16 can be found, at least, in paragraphs [0011], [0013], and [0026] for examples of non-rotational power transfer media. Independent claim 28 has been amended to include the limitations of canceled dependent claims 29 and 40. Dependent claims 26 and 27 were amended to correct an antecedent basis issue with the term "power shunt." Dependent claims 3-5, 7-9, 30, 31, 33-55, 37, and 38 were amended to provide proper dependency due to cancellation of claims 2 and 29.

Claim Rejections Under 35 USC §102

Claims 1-2, 8, 28-29, and 34 were rejected under 35 U.S.C. 102(b) as being anticipated by Sakamoto '397. Applicants respectfully traverse the rejection.

To anticipate a claim, the reference must teach every element of the claim. A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). The identical invention must be shown in as complete detail as is contained in the ... claim. *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

Application No. 10/763,445
Amendment dated January 25, 2006
Reply to Office Action of October 25, 2005

Docket No.: 66046-0007 (01-rTRN-28)

Independent claims 1 and 28, as amended, positively recite "a power shunt including a first motor-generator and a second motor-generator, that selectively shunts at least a portion of the power applied to the transmission by one of the input and the output to the other one of the input and the output." In contrast, Sakamoto teaches a first motor 29 connected to a first input shaft 23, and a second motor 30 connected to a second input shaft 24, with no motor generator connected to the output shaft 27. Accordingly, the apparatus of Sakamoto cannot shunt power between an input and an output.

Thus, Sakamoto does not teach every limitation of independent claims 1 and 28, as required in *Verdegaal Bros.* As noted above, dependent claims 2 and 29 have been cancelled. Dependent claims 8 and 34 teach independently patentable subject matter, although they are also patentable by being dependent on an allowable base claim. Accordingly, reconsideration and withdrawal of the rejection is respectfully requested.

Claims 1-2, 7-8, 14-20, 22-23, 26-29, 33-34 and 40-41 were rejected under 35 U.S.C. 102(b) as being anticipated by Loeffler '127. Applicants respectfully traverse the rejection.

Independent Claims 1 and 28

In rejecting independent claims 1 and 28, the Examiner states that Loeffler teaches a power shunt having a first motor generator and a second motor generator. (Non-Final Office Action Mailed October 25, 2005, page 3). However, Loeffler teaches an electrical machine 22 that uses a first rotor 24 to electromagnetically transfer a force to a first stator 26. (Loeffler, column 3, lines 23-30). In contrast, independent claims 1 and 28, as amended, recite "the first motor-generator selectively generates a power output from a rotational input, the second motor-generator selectively generates a rotational output from a power input." This limitation is not taught in Loeffler.

Independent Claim 16

In rejecting independent claim 16, the Examiner stated that Loeffler teaches the second power path. (Non-Final Office Action Mailed October 25, 2005, page 3). Independent claim 16 has been amended to clarify the description of the second power path as "a second power path between the input and the output of the transmission, the second power path

Application No. 10/763,445
Amendment dated January 25, 2006
Reply to Office Action of October 25, 2005

Docket No.: 66046-0007 (01-rTRN-28)

including a transfer of power from a rotational input to a non-rotational power transfer medium in one of the first motor-generator and the second motor-generator, and a transfer of power from the non-rotational power transfer medium to a rotational output in one of the first motor-generator and the second motor-generator." In contrast, Loeffler discloses a power transfer from a rotational input from first rotor 24, via an electromagnetic interaction, to a stator 26. (Loeffler column 2, lines 13-15). Furthermore, Loeffler further teaches transfer of the power transferred to the stator 26 as a rotational power to the output shaft 36. (Loeffler column 3, lines 23-30). Accordingly, Loeffler does not teach a second power path as positively recited in independent claim 16.

Dependent claims 7-8, 14-20, 22-23, 26, 27, 33-34 and 41 teach independently patentable subject matter, although they are also patentable by being dependent on an allowable base claim. As an example, claim 20 recites "the second power path includes electric power generated by one of the first and second motor-generators." In contrast, Loeffler does not teach a second power path that includes the generation of electrical power, as a rotational input is converted to an electromagnetic force and then to a rotational output. (Loeffler column 3, lines 23-30). Accordingly, reconsideration and withdrawal of the rejection is respectfully requested.

Claims 1-5, 7, 9, 11-13, 28-31, 33, 35, and 37-38 were rejected under 35 U.S.C. 102(b) as being anticipated by Schmidt '757. Applicants respectfully traverse the rejection.

"[T]he reference must describe the applicant's claimed invention sufficiently to have placed a person of ordinary skill in the field of the invention in possession of it." *In re Spada* 911 F. 2d 705, 708, 15 USPQ2d 1655, 1657 (Fed. Cir. 1990).

Independent claim 1, as amended, positively recites that "the ratio gears are engaged by a clutch and the power shunt is configured to route power applied to the transmission by one of the input and the output to the other one of the input and the output such that the rotational speed of a ratio gear is substantially similar to the rotational speed of an engaging clutch during a gear ratio change." In contrast, Schmidt teaches a transmission with no mention of applying power in order to synchronize a clutch and a gear prior to engagement of the clutch. Indeed, the transmission of Schmidt is incapable of synchronization at speed, as at least one of the torque

Application No. 10/763,445
Amendment dated January 25, 2006
Reply to Office Action of October 25, 2005

Docket No.: 66046-0007 (01-rTRN-28)

transfer devices 62, 70 must be engaged in order to rotate the output member 64. Thus, Schmidt does not teach every limitation of independent claim 1, as required in *In re Spada*.

Independent claim 28, as amended, positively recites that "the ratio gears are engaged by a clutch and the power shunt is configured to route power applied to the transmission by one of the input and the output to the other one of the input and the output such that power transmitted between a selected ratio gear and an engaging clutch significantly decreases or falls to zero." In contrast, Schmidt teaches to disengage the torque transfer device 70 as the torque transfer device 62 is engaged while the planetary is rotating. (Schmidt, column 10, lines 44-46). Accordingly, the transmission of Schmidt is not configured to reduce relative torque between a clutch and a gear prior to clutch engagement.

Dependent claims 3-5, 7, 9, 11-13, 30-31, 33, 35, and 37-38 teach independently patentable subject matter, although they are also patentable by being dependent on an allowable base claim. Accordingly, reconsideration and withdrawal of the rejection is respectfully requested.

Claims 49-50 were rejected under 35 U.S.C. 102(b) as being anticipated by Bowen '291. Applicants respectfully traverse the rejection.

Independent claim 49, as amended, positively recites "at least a portion of the motor generator is coupled to at least a portion of the output with no clutch operably interposed therebetween." In contrast, Bowen teaches a first motor generator 120 connected to a transfer shaft 62 and a first input shaft 48, and a second motor generator 122 connected to a second input shaft 50. In both of the motor generators of Bowen, a clutch is operably interposed between all portions of the motor generator and all portions of an output of the transmission, such as the output shaft 40. Furthermore, one of skill in the art would recognize that Bowen requires these clutches in the operation of the transmission of Bowen. Thus, Bowen does not teach every limitation of independent claim 49, as required in *In re Spada*.

Dependent claim 50 teaches independently patentable subject matter, although it is also patentable by being dependent on an allowable base claim. Accordingly, reconsideration and withdrawal of the rejection is respectfully requested.

Application No. 10/763,445
Amendment dated January 25, 2006
Reply to Office Action of October 25, 2005

Docket No.: 66046-0007 (01-rTRN-28)

Claim Rejections Under 35 USC §103

Claims 24-25 were rejected under 35 U.S.C. 103(a) as being unpatentable over Loeffler as applied to claim 16 above, and further in view of Sakamoto '397. Applicants respectfully traverse the rejection.

MPEP Section 2143 sets forth the basic requirements for the Patent and Trademark Office to establish prima facie obviousness as follows: "To establish a prima facie case of obviousness, three criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations." "To establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art." *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). M.P.E.P. § 2143.03. Accord. M.P.E.P. § 706.02(j).

"The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in the applicant's disclosure." *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

The remarks presented above with respect to the §102 rejection are equally applicable here. Specifically, the inadequacy of Loeffler to teach every element of independent claim 16 by not teaching a second power path as limited in claim 16 is also fatal to the Examiners §103 rejection. Additionally, Sakamoto does not teach a second power path between the input and the output of the transmission, and therefore, cannot make up for the inadequacy described above. Therefore, the combination of Loeffler and Sakamoto does not teach every limitation of independent claim 16, as required in *In re Royka*.

Furthermore, dependent claims 24 and 25, being dependent upon claim 16, are patentable by being dependent on an allowable base claim. Accordingly, reconsideration and withdrawal of this rejection is respectfully requested.

Application No. 10/763,445
Amendment dated January 25, 2006
Reply to Office Action of October 25, 2005

Docket No.: 66046-0007 (01-rTRN-28)

CONCLUSION

In view of the above amendment, applicant believes the pending application is in condition for allowance. If, however, there are any outstanding issues that can be resolved by telephone conference, the Examiner is earnestly encouraged to telephone the undersigned representative.

Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 18-0013, under Order No. 66046-0007 from which the undersigned is authorized to draw. To the extent necessary, a petition for extension of time under 37 C.F.R. §1.136 is hereby made, the fee for which should also be charged to this Deposit Account.

Dated: 1-25-06

Respectfully submitted,

By Kenneth W. Jarrell

Michael B. Stewart

Reg. No. 36,018

Kenneth W. Jarrell

Registration No.: 52,484

RADER, FISHMAN & GRAUER PLLC

39533 Woodward Avenue

Suite 140

Bloomfield Hills, Michigan 48304

(248) 593-3310

Attorneys for Applicant

R0332301.DOC

PTO/SB/87 (09-04)

Approved for use through 07/31/2006, OMB 0661-0031

U. S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Application No. (if known): 10/763,445

Attorney Docket No.: 66046-0007

Certificate of Transmission under 37 CFR 1.8

I hereby certify that this correspondence is being facsimile transmitted to the United States Patent and Trademark Office.

on January 25, 2006
Date



Signature

Victoria L. Wood

Typed or printed name of person signing Certificate

Registration Number, if applicable

(248) 593-3328

Telephone Number

Note: Each paper must have its own certificate of transmission, or this certificate must identify each submitted paper.

Amendment in Response to Non-Final Office Action (16 pages)